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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/587,556

09/14/2006

Takayuki Kuroda

F-9185

8933

28107 7590 05/27/2009  
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EXAMINER

GRANT, ALVIN J

ART UNIT

PAPER NUMBER

3723

MAIL DATE

DELIVERY MODE

05/27/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/587,556	<b>Applicant(s)</b> KURODA ET AL.	
	<b>Examiner</b> ALVIN J. GRANT	<b>Art Unit</b> 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/7/08</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-8 and 12** are rejected under 35 U.S.C. 102(b) as being anticipated by Dasser DE 14 78 857 A1.

**Referring to claim 1**, Dasser discloses a clamping mechanism comprising: a clamping main body **(1)** fixed to the base and is communicatingly formed with a rod insertion hole **(Fig. 1)** and a piston receiving cavity **(at 4)**, a clamping rod which is inserted through the rod insertion hole of the clamping main body and protruding its top-end portion from the clamping main body, the top-end portion being provided with an engagement portion capable of engaging with the inner wall or side wall of the hole, a piston member **(2)** movably mounted in the piston receiving cavity **(at 4)** of the clamping main body, a rod support mechanism which moves the engagement portion of the clamping main body in a direction roughly rectangular to the longitudinal direction of the clamping rod and switchably supports the clamping rod in the clamping main body or the piston member across a clamping position and a clamp release position, a piston driving means for driving the piston member across the clamping position and the clamp release position, the piston driving mechanism being provided with a spring for elastically energizing the piston member away from the clamping object of the clamping position; and a cam

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mechanism (**claim 2**) for driving the engagement portion of the clamping rod in a clamping direction roughly rectangular to the longitudinal direction of the clamping rod by a driving force of the piston driving means for driving the piston member to the clamping position; a rod return mechanism for returning the clamping rod to the clamp release position when the piston member is moved to the clamp release position (**claim 1**).

**Referring to claims 2-8 and 12**, see claims 1-6; and Figs. 2-6.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1, 2, 4, 6, 8, and 10-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yonezawa 6,095,509 in view of Kohlert 5,746,420.

Yonezawa discloses a clamping device for fixing a clamping object to a base by releasably engaging with an inner wall of a hole (2) or side wall formed in the clamping object, the clamping device comprises claimed elements including: a clamping main body (11a) fixed to the base (at 29) and is communicatingly formed with a rod insertion hole (2) and a piston receiving cavity (20), a clamping rod (12) which is inserted through the rod insertion hole (2) of the clamping main body and protruding its top-end portion from the clamping main body, the top-end portion being provided with an engagement

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portion capable of engaging with the inner wall or side wall of the hole, a piston member (20) movably mounted in the piston receiving cavity (at 20) of the clamping main body, a rod support mechanism which moves the engagement portion of the clamping main body in a direction roughly rectangular to the longitudinal direction of the clamping rod and switchably supports the clamping rod in the clamping main body or the piston member across a clamping position and a clamp release position, a piston driving means for driving the piston member across the clamping position and the clamp release position, the piston driving mechanism being provided with a spring for elastically energizing the piston member away from the clamping object to the clamping position; a rod return mechanism for returning the clamping rod to the clamp release position when the piston member is moved to the clamp release position (col. 8 lines 9-23). Yonezawa does not specifically disclose a cam mechanism. Kohlert discloses a clamping that uses a cam mechanism to manipulate the movement of piston in a longitudinal direction so as to facilitate the clamping effort. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Yonezawa's apparatus to have a cam mechanism to manipulate the movement of piston in a longitudinal direction as taught by Kohlert so as to facilitate the clamping effort.

### ***Response to Arguments***

5. Applicant's arguments filed 2/5/09 have been fully considered but they are not persuasive.

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- In response to Applicant's arguments that US Patent 6,095,509 (to Yonezawa) does not disclose "the piston driving mechanism being provided with a spring for elastically energizing the piston member away from the clamping object to the clamping position", this feature is disclosed at column 5, lines 39-44.
- Applicant's arguments regarding the cam mechanism is moot in view of new grounds for rejection.
- In response to applicant's arguments that European Patent DE 14 78 857 A1 (to Dasser) does not disclose "the piston driving mechanism being provided with a spring for elastically energizing the piston member away from the clamping object to the clamping position", see claim 4.
- In response to applicant's arguments that Dosser does not disclose a cam mechanism, see claim 3.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALVIN J. GRANT whose telephone number is (571)272-4484. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alvin J Grant/  
Examiner, Art Unit 3723